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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,586	09/19/2003	Thomas E. Creamer	BOC9-2003-0029 (398)	6439
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AKERMAN SENTERFITT			MITCHELL, JASON D	
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2193

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/665,586	Applicant(s) CREAMER ET AL.	
	Examiner Jason Mitchell	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/02/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to an application filed 9/19/03.

Claims 1-30 are pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 14 and 15 recite only software object 'hosts', ghost agents (again software) and a customer service application and thus recite only software per se.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-11, 17, 19-27 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,122,664 to Boukobza et al. (Boukobza).

Regarding Claims 1, 17 and 30: Boukobza discloses receiving a problem indication relating to said application (col. 2, lines 46-52 'test conditions ... and then ... warn of a

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problem'); identifying a host within a grid environment (col. 4, lines 64-67 'agents are installed ... in the nodes to be monitored'; col. 5, lines 13-18 'An autonomous agent SAA is chiefly composed of a generic agent GA related to specific modules SM (SM1, SM2, ..., SMn), each of which is specific to an object type'); associating a ghost agent with said host (col. 4, lines 64-67 'agents are installed ... in the nodes to be monitored'; col. 5, lines 13-18 'An autonomous agent SAA is chiefly composed of a generic agent GA related to specific modules SM (SM1, SM2, ..., SMn), each of which is specific to an object type'); replicating actions of said host for use by said ghost agent (col. 6, lines 30-34 'log files of the actions of each node monitored'); recording data relating to said replicated actions (col. 5, lines 23-25 'A parameter ... (command to be executed, trace, curve display, etc.)'); and responding to said problem based at least in part upon said recorded data (col. 5, lines 59-62 'If a parameter condition is true, an action is initiated').

Regarding Claims 3 and 19: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses providing a customer service interface (col. 4, lines 50-51 'The interface GUI also allows the display of parameter value curves'), wherein a customer service representative utilizes said customer service interface during said responding step (col. 6, lines 30-34 'collecting (in the management node) the log files ... for the independent analysis preformed by the management node.').

Regarding Claims 4 and 20: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses executing a test using said ghost agent, wherein said test utilizes said recorded data (col. 5, lines 23-29 'conditions related to the measurement just performed ... the action to be initiated when this condition is true').

Regarding Claims 5 and 21: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses said responding further comprises performing a debugging operation using said ghost agent, wherein said debugging operation utilizes at least one replicated action (col. 9, lines 20-21 'the measurement is stored in a "trace" file TF for autonomous analysis').

Regarding Claims 6 and 22: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses comparing said recorded data with at least one operational threshold provided by said ghost agent, such that said recorded data includes results of said comparing step (col. 5, lines 23-29 'A parameter contains ... the description of ... conditions related to the measurement ... (operator, threshold, etc.)').

Regarding Claims 7 and 23: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses automatically detecting a problem within said application; and automatically generating said problem indication responsive to said detecting step (col. 2, lines 46-52 'test conditions ... and then ... warn of a problem').

Regarding Claims 8 and 24: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses responsive to receiving said problem indication, automatically routing application activity from an area of said grid environment in which said problem occurred to an alternative area of said grid environment (col. 7, lines 59-63 'the application is switched to another node, for reasons of ... failure, of the original node').

Regarding Claims 9 and 25: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses automatically fixing said problem based at

least in part upon said recorded data (col. 2, lines 46-52 'test conditions ... and then ... correct').

Regarding Claims 10 and 26: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses selecting a plurality of said hosts; and for each host repeating said associating step, said replicating step, said recording step, and said responding step (col. 4, lines 36-39 'monitor n machines'; col. 5, lines 13-18 'An autonomous agent SAA ... specific to an object type').

Regarding Claims 11 and 27: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses identifying a location that is external to said ghost agent; and conveying said recorded data to said identified location (col. 6, lines 30-34 'collecting (in the management node) the log files ... for the independent analysis preformed by the management node.'). Note Identification of the Management Node is necessary to successfully transfer the data from collected by the agents to the Management Node.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,122,664 to Boukobza et al. (Boukobza) in view of US 2002/0087949 to Golender et al. (Golender).

Regarding Claims 2 and 18: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza discloses receiving a problem indication (col. 2, lines 46-52 'test conditions ... and then ... warn of a problem') and an associating step (col. 4, lines 64-67 'agents are installed ... in the nodes to be monitored'; col. 5, lines 13-18 'An autonomous agent SAA ... is specific to an object type'), and that said responding step further comprises using said recorded data to determine actions of said user that resulted in said problem (col. 6, lines 30-35 'the log files of the actions ... for the independent analysis'). But does not explicitly disclose receiving said problem indication from a user.

Golender teaches that 'Quite often, software problems appear for the first time at a customer's site' and 'when trying to debug these problems ... in response to a bug report ... the problem cannot be reproduced' (par. [0008])

Thus it would have been obvious to a person of ordinary skill in the art at the time of the invention to perform Boukobza's associating step (col. 4, lines 64-67 'agents are installed ... in the nodes to be monitored'; col. 5, lines 13-18 'An autonomous agent SAA ... specific to an object type') on a host associated with the user (Golender [0008] 'customer's site') and in response to the 'bug report' taught by Golender ([0008]) because, as noted above, 'Quite often, software problems appear for the first time at a

customer's site' and 'when trying to debug these problems ..in response to a bug report ... the problem cannot be reproduced' (par. [0008]).

Claims 12-16 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,122,664 to Boukobza et al. (Boukobza) in view of US 6,681,243 to Putzolu et al. (Putzolu).

Regarding Claims 12 and 28: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza does not disclose moving said host and ghost agent within said grid environment.

Putzolu teaches moving said host within said grid environment (col. 3, lines 59-61 'Agents ... move to another device or environment'; col. 4, lines 17-23 'an agent may be ... a user application such as a word processor'); and moving said ghost agent within said grid environment (col. 3, lines 59-61 'Agents ... move to another device or environment'; col. 4, lines 17-23 'an agent may be ... an application functioning to diagnose, report on, or correct network conditions') in an analogous art for the purpose of managing a network (col. 3, lines 48-54 'The system and method ... allow for easier and more effective management of a network').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the techniques disclosed by Boukobza (col. 4, lines 36-39 'the process ... to monitor n machines') to monitor mobile hosts as taught by Putzolu (col. 4, lines 17-23 'a user application such as a word processor') and to move Boukobza's ghost agent (col. 4, lines 64-67 'autonomous agents') in accordance with movement of the

associated host (col. 3, lines 59-61 'Agents ... move to another device or environment') in order to 'allow for easier and more effective management of a network' (Putzolu col. 3, lines 48-54) which contained such mobile hosts.

Regarding Claims 13 and 29: The rejections of claims 1 and 17 are incorporated, respectively; further Boukobza does not disclose disassociating said ghost agent from said host; and associating said ghost agent with a different host.

Putzolu teaches disassociating an agent from said host; and associating said ghost agent with a different host (col. 3, lines 59-61 'Agents ... may execute on a device or environment, move to another device or operating environment, and resume execution.') in an analogous art for the purpose of managing a network (col. 3, lines 48-54 'The system and method ... allow for easier and more effective management of a network').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide Boukobza's Ghost Agents (col. 4, lines 64-67 'autonomous agents') with the mobility taught by Putzolu (col. 3, lines 59-61 'Agents ... may execute on a device or environment, move to another device or operating environment, and resume execution.') in order to 'allow for easier and more effective management of a network' (Putzolu col. 3, lines 48-54).

Regarding Claim 14: Boukobza discloses a plurality of hosts, wherein said hosts are software objects for an application domain distributed within a grid environment (col. 4, lines 64-67 'agents are installed ... in the nodes to be monitored'; col. 5, lines 13-18 'An autonomous agent SAA ... is specific to an object type'); at least one ghost agent

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configured to be associated with at least one of said hosts (col. 5, 13-18 'An autonomous agent SSA is chiefly composed of a generic agent GA related to specific modules SM (SM1, SM2 ... SMn) each of which is specific to an object type or to a particular domain'), and a customer service application configured to utilize ghost agents to determine actions leading to at least one problem (col. 6, lines 30-35 'collecting (in the management node) the log files of the actions ... for the independent analysis') but does not disclose wherein said ghost agent moves within a grid environment.

Putzolu teaches an agent which moves within a grid environment (col. 3, lines 59-61 'Agents ... may execute on a device or environment, move to another device or operating environment, and resume execution.') in an analogous art for the purpose of managing a network (col. 3, lines 48-54 'The system and method ... allow for easier and more effective management of a network').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide Boukobza's Ghost Agents (col. 4, lines 64-67 'autonomous agents') with the mobility taught by Putzolu (col. 3, lines 59-61 'Agents ... may execute on a device or environment, move to another device or operating environment, and resume execution.') in order to 'allow for easier and more effective management of a network' (Putzolu col. 3, lines 48-54)

Regarding Claim 15: The rejection of claim 14 is incorporated; further Boukobza discloses said customer service application is further configured to debug said at least

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one reported problem using said ghost agents (col. 2, lines 46-52 'test conditions ... and then ... correct').

Regarding Claim 16: The rejection of claim 14 is incorporated, further Boukobza discloses a service data store communicatively linked to a plurality of ghost agents (Fig. 1, 'Trace File'), wherein said service data store is configured to record data generated by said ghost agents for use by said customer service application (col. 6, lines 30-35 'collecting (in the management node) the log files of the actions ... for the independent analysis').

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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5/26/06


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